Instructional Framework





Emergency Medical Services 51.0900.30

Domain 1: Body Systems and Emergencies

55-65% Instructional Time

STANDARD 5: DEMONSTRATE KNOWLEDGE ABOUT THE ANATOMY AND THE FUNCTION OF HUMAN SYSTEMS INCLUDING CORR	ECT
TERMINOLOGY	

TERMINOLOGY	
5.1 Describe the structure and function of the musculoskeletal system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.2 Describe the structure and function of the respiratory system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.3 Describe the structure and function of the cardiovascular system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.4 Describe the structure and function of the cardiovascular system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.5 Describe the structure and function of the nervous system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.6 Describe the structure and function of the digestive system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.7 Describe the structure and function of the integumentary system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.8 Describe the structure and function of the endocrine system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms
5.9 Describe the structure and function of the renal system and properly name and label on a diagram	Label diagramsIdentify body systemsDefine key terms

5.10 Describe the anatomy and physiology differences between children and adults that affect assessment and	Label diagrams Identify body systems
emergency care	Define key terms
5.11 Use common prefixes, suffixes, and roots to determine the meaning of medical terms	Define key terms
5.12 Explain acronyms and abbreviations commonly used in EMS	Define key terms
5.13 Use anatomical and medical terms in terms of position and direction to describe the location of body structures and body positions in written and oral communication with EMS and healthcare professionals, as well as authority personnel	 Label diagrams Identify body systems Define key terms
STANDARD 7.0 ACQUIRE BASELINE VITAL SIGNS, SAMPLE HISTORY, PRIMARY	Y ASSESSMENT, SECONDARY ASSESSMENT, AND REASSESSMENT
7.1 Assess a patient's baseline vital signs (e.g., pulse, respirations, skin, pupils, blood pressure, oxygen saturation, blood glucose)	 Demonstrate baseline vital signs Document vital signs Define Key Terms
7.2 Obtain a SAMPLE history (i.e., signs/symptoms, allergies, medications, pertinent past history, last oral intake, events leading to injury or illness)	 Describe SAMPLE history Apply SAMPLE history Document SAMPLE history Define key terms
7.3 Complete a primary assessment for an infant, child, and adult (e.g., form a general impression; determine responsiveness; assess airway, breathing, and circulation; determine priorities of patient care)	 Identify primary assessment Demonstrate primary assessment of patient Define Key Terms
7.4 Explain the C-A-B approach (circulation, airway, breathing) versus the A-B-C approach (airway, breathing, circulation) to a primary assessment	 Demonstrate opening airway Define key terms Demonstrate acquiring baseline respiratory rate Demonstrate adequate ventilations Identify respiratory distress and how to correct it Identify obstructed airway and how to clear it Identify different lung sounds
7.5 Complete a secondary assessment for a patient with medical and/or traumatic injuries to determine appropriate physical examination	 Identify secondary assessment Demonstrate secondary assessment of patient Define Key Terms
7.6 Conduct a physical examination as determined appropriate including respiratory system, cardiovascular system, neurological system, musculoskeletal system, and all anatomical regions	 Demonstrate physical examination Identify affected body system Define Key Terms
7.7 Explain the importance of recording changes in the patient's condition and reassessing interventions	 Demonstrate reassessing interventions Define Key Terms

7.8 Discuss the assessment of a patient who appears to be suffering from a behavioral or psychiatric emergency	Identify behavioral or psychiatricDefine Key Terms
7.9 Explain the steps of assessment for pediatric patients, including the scene size-up, primary assessment, secondary assessment with physical exam, and reassessment	 Demonstrate assessment of a pediatric patient Demonstrate Scene Size Up Demonstrate Primary Assessment Demonstrate Secondary Assessment Define Key Terms
7.10 Apply fundamental knowledge of lifespan development to patient assessment and management	 Apply and demonstrate fundamental knowledge Define Key Terms
7.11 Discuss situations requiring the need for advanced life support (equipment and personnel)	 Identify Advanced Life Support Identify necessary equipment Define Key Terms
7.12 Demonstrate effective communication with patients and family members of various ages and cultures, hospital personnel, and authority figures	 Identify effective communication Demonstrate effective communication Define Key Terms
7.13 Discuss the importance of having organized, complete, concise verbal reports with pertinent patient information to be delivered to receiving healthcare personnel	Define Key Terms
STANDARD 4.0: DEMONSTRATE BASIC KNOWLEDGE OF GENERAL PHARMACO	N OCY
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4.1 Identify the drugs in the EMT Basic Scope of Practice and describe each according to generic and common trade names, indications, contraindications, side effects, forms, and routes of administration	 Define key terms Identify medications in the emr scope of practice Indications/contraindications of each meds Identify trade and generic names Identify Side effects Identify route of administration Identify forms
according to generic and common trade names, indications, contraindications,	 Define key terms Identify medications in the emr scope of practice Indications/contraindications of each meds Identify trade and generic names Identify Side effects Identify route of administration

4.4 Identify special considerations in medication related to the age and weight of patients	 define key terms Identify considerations in medications related to age; size; of patient
4.5 Explain the importance of accurate documentation of drug administration and follow up on drug administration	 define key terms Identify the importance of documentation of the drug administration and follow up on administration
STANDARD 8.0 ASSESS AND MANAGE MEDICAL EMERGENCIES	
8.1 Recognize conditions, signs, and symptoms of respiratory emergencies (e.g., COPD, asthma, pneumonia, pulmonary embolism, epiglottitis, common cold)	 Recognize and Identify respiratory emergencies Define Key Terms
8.2 Provide respiratory emergency care based on medical assessment and physical examination [e.g., oxygen techniques, artificial ventilation, CPAP (continuous positive airway pressure), inhalers]	 Demonstrate assessment of patient experiencing a respiratory emergency Identify and demonstrate appropriate treatment Define Key Terms
8.3 Recognize signs and symptoms of cardiac emergencies (e.g., coronary artery disease, aneurysm, electrical/mechanical malfunctions of the heart, angina pectoris, acute myocardial infarction, congestive heart failure)	 Recognize and Identify cardiac emergencies Define Key Terms
8.4 Provide cardiac emergency care based on medical assessment and physical examination [e.g., administration of nitroglycerin or aspirin, AEDs (automated external defibrillators), chest compressions, CPR	 Demonstrate assessment of patient experiencing a cardiac emergency Identify and demonstrate appropriate treatment Define Key Terms
8.5 Recognize conditions, signs, and symptoms of diabetic emergencies involving hyperglycemia and hypoglycemia and develop a plan to manage patients	 Recognize and Identify diabetic emergencies Define Key Terms
8.6 Recognize signs, symptoms, and history consistent with cause of altered mental status, including seizures, stroke, dizziness, and syncope and develop a plan to manage patients	 Recognize altered mental status emergencies identify possible causes of altered mental status Define Key Terms
8.7 Differentiate between the signs and symptoms of an allergic reaction and an anaphylactic reaction	 Recognize and list signs and symptoms of an allergic reactions Identify causes for allergic reactions Define Key Terms
8.8 Prioritize the steps in managing and reassessing patients with allergic and anaphylactic reactions (e.g., administering and assisting a patient in using an epinephrine auto-injector)	 Recognize signs and symptoms of an allergic reaction Demonstrate the management of a patient experiencing an allergic or anaphylactic reaction Identify appropriate treatment Demonstrate use of Epinephrine auto-injector Define Key Terms
8.9 Recognize the signs and symptoms of patients where poisoning (ingested, inhaled, or absorbed), alcohol abuse, or substance abuse (stimulants, depressants, narcotics, volatile chemicals, and hallucinogens) are involved and develop a management and/or treatment plan	 Recognize the signs and symptoms of a poisoning emergencies Identify and list possible causes of poisoning Define Key Terms

8.10 Recognize conditions that can cause unusual behavior (e.g., stress, psychiatric condition, attempted suicide) and determine a treatment plan	 Recognize unusual behavior Possible causes of unusual behavior Define key terms
8.11 Recognize signs and symptoms of environmental-related emergencies (e.g., hypothermia, effects of heat, water-related accidents, bites and bee stings) and develop a management and/or treatment plan	 Recognize and list signs and symptoms of an environmental-related emergencies Identify causes of environmental-related emergencies Define key terms
STANDARD 9: ASSESS AND MANAGE TRAUMATIC INJURIES	
9.1 Differentiate among arterial, venous, and capillary bleeding and describe the care for external bleeding	 Difference between Arterial bleeding Capillary bleeding Venous Bleeding Identify how to care for each Define key terms
9.2 Identify the signs and symptoms of internal bleeding and describe the steps in the care for internal bleeding	 Identify signs and symptoms of internal bleeding Define steps in the care for internal bleeding Define key terms
9.3 Distinguish between open- and closed-soft tissue wounds	 Identify difference between open and closed fractures Identify treatment for a closed fracture Identify treatment for open fractures Identify and demonstrate treatment for each Define key terms
9.4 Describe treatment for abrasions and lacerations, puncture wounds, impaled objects, avulsions, amputations, and genital injuries, including dressing and bandaging open wounds	 Identify difference between abrasion Lacerations Puncture wounds Impaled objects Avusion Amputations Genital injuries Identify and demonstrate treatment of each Define key terms
9.5 Describe assessment and management of burns with each level of severity (e.g., thermal, chemical, electrical, radiation)	 Identify and demonstrate management and treatment of Burns Identify each type burns Chemical Thermal Electrical Radiation Define key terms

9.6 Describe four types of musculoskeletal injury (fracture, dislocation, sprain, and strain), define open and closed extremity injuries, and discuss the assessment of injury and general care	 Identify and treat types of musculoskeletal injuries Define key terms Humerus Injuries Radius Injuries Metacarpal Injuries Femur Injuries Fiibula Injuries Tibia Injuries Metatarsal Injuries
9.7 Describe the assessment and management of types of musculoskeletal injuries (e.g., shoulder girdle injury, pelvic injury, hip dislocation or fracture, femoral shaft fracture, knee injury, tibia or fibula injury, ankle or foot injury)	 Identify and treat types of musculoskeletal injuries Shoulder Pelvic Hip/ fracture and dislocation Mid-shaft femoral fractures Femur fractures non mid-shaft or dislocation Knee fractures and dislocations Tibia injuries Fibula injuries Ankle injuries Foot injuries Define key terms
9.8 Recognize signs and symptoms of injury to the head, neck, and spine and determine the management for injuries (e.g., applying a cervical collar; immobilizing a seated patient, including rapid extrication for high priority patients; applying a long backboard; rapid extrication from a child safety seat; immobilizing a standing patient, immobilizing a patient wearing a helmet)	 Identify and recognize signs and symptoms of head, neck and spine injuries Determine and describe management for injuries apply c-collar Immobilization of seated patient Rapid extrication Priority patients Applying a long board Immobilizing standing patient Immobilizing patient wearing helmet Define key terms
STANDARD 10: ASSESS AND MANAGE OBSTETRIC AND GYNECOLOGIC EMER	RGENCIES
10.1 Review the anatomical and physiological changes that occur during pregnancy and describe fetal development	 Identify changes experienced during pregnancy Describe fetal development Define Key Terms
10.2 Describe the three stages of labor	 Describe the three stages of labor Define Key Terms
10.3 Describe the steps in preparation and delivery	 Describe delivery and preparation steps Define Key Terms

10.4 Describe and discuss care for complications of delivery (breech presentation, limb presentation, prolapsed umbilical cord, multiple birth, premature birth, meconium)	 Describe care for delivery complication emergencies Identify complications of delivery Define Key Terms
10.5 Describe and discuss care for emergencies in pregnancy (e.g., excessive pre-birth bleeding, ectopic pregnancy, seizures in pregnancy, miscarriage and abortion, stillbirths)	 Describe care for pregnancy complication emergencies Identify complications of delivery Define Key Terms
10.6 Describe and discuss care for gynecological emergencies (e.g., vaginal bleeding, sexual assault)	 Describe care for gynecological emergencies Discuss care for gynecological emergencies Define Key Terms
10.7 Explain the indications and procedures for neonatal resuscitation	 List and explain the indications and procedures for neonatal resuscitation Define Key Terms
10.8 Describe after-delivery care for mother and baby	Describe after delivery care for mother and babyDefine Key Terms
STANDARD 11.0 ASSESS AND MANAGE PEDIATRIC EMERGENCIES	
11.1 Describe and discuss the developmental and anatomical differences in infants and children	 Describe the developmental and anatomical differences in infants and children Define Key Terms
11.2 Recognize common medical and trauma situations involving pediatric patients [e.g., difficulty breathing, seizures, fever, meningitis, diarrhea and vomiting, poisoning, drowning, sudden infant death syndrome (SIDS)]	 Recognize and treat medical and trauma situations involving pediatric patients. Define Key Terms
11.3 Discuss the signs and symptoms of child abuse and neglect and the EMT's ethical and legal responsibilities	 Recognize and discuss the signs and symptoms of child abuse and neglect. Identify and discuss the EMT's ethical and legal responsibilities Define Key Terms
11.4 Demonstrate adaptations to techniques and equipment to properly manage the airway, ventilation, and oxygenation of pediatric patients	 Demonstrate techniques to properly manage a pediatric patient airway, ventilation and oxygenation. Define Key Terms
11.5 Discuss special challenges for pediatric patients (e.g., tracheostomy tubes, home artificial ventilators, central intravenous lines, gastrostomy tubes)	 Recognize and discuss special challenges for pediatric patients. Define Key Terms

Domain 2: Health and Safety

15-25% Instructional Time

STANDARD 2.0 MAINTAIN THE WELL-BEING OF THE EMERGENCY MEDICAL TEC	CHNICIAN
2.1 Describe different responses to emergency incidents (e.g., hazardous material, terrorist, rescue, violence)	 List and describe different responses for emergency incidents Define Key Terms
2.2 Describe personal protection from airborne and bloodborne pathogens	 List and describe personal protection from airborne and bloodborne pathogens Define Key Terms
2.3 Describe provisions of OSHA, CDC, and the Ryan White CARE Act as they relate to infection control	 Describe OSHA Describe CDC Describe Ryan White CARE Act Define Key Terms
2.4 Determine the appropriate personal protective equipment (PPE) to prevent exposure to infectious diseases	 List and determine the appropriate personal protective equipment Define Key Terms
2.5 Discuss body substance isolation (BSI) practices	 List and describe body substance isolation practices Define Key Terms
2.6 Describe the proper hand-washing procedure	 Demonstrate proper hand washing procedure Define Key Terms
2.7 Describe health habits that promote physical and mental well-being	Discuss good health habitsDefine Key Terms
2.8 Discuss different reactions patients and family members may have to death and dying and how to handle them	 List and describe different reactions to death and dying Describe methods to handle reactions Define Key Terms
2.9 Discuss the importance of critical incident stress debriefing (CISD) and critical incident stress management (CISM)	Describe and discuss critical incident stress debriefing (CISD) and critical incident stress management (CISM)
6.0 MANAGE THE EMERGENCY SCENE AND USE SAFETY PRECAUTIONS	
6.1 Identify the components of scene size-up (e.g., potential dangers, body substance isolation, nature of illness or mechanism of injury, number of patients, need for additional resources)	 Identify and demonstrate appropriate Personal protective equipment for different types of calls Gloves Mask Gown Eye protection Identify and describe different components of scene size-up Number of patents Potential hazards Identify and describe Additional resources needed at scenes Law enforcement Utility department Fire department Identify mechanism of injury

	 Identify and describe different types of Vehicle accidents Head on collision Rollover accidents T Bone accidents Rotational accidents Define key terms
6.2 Describe potential hazards found at a scene of a medical or a trauma patient	 Identify and describe potential hazards at the scene Define key terms
6.3 Describe when to establish a danger zone at a scene	 Identify and describe a danger zone for Hazardous materials Define key terms
6.4 Describe indications of possible crime scenes and potential violence	 Describe and identify potential crime scenes Identify and Demonstrate what actions to take when entering and exiting a crime scene Identify and demonstrate actions taken with potential hazards at a Crime scene Define key terms
6.5 Describe when to use Standard Precautions to protect against disease exposure	 Describe and demonstrate proper personal protective equipment used to prevent the spread of diseases Identify and demonstrate the steps to take after an exposure takes place Demonstrate the importance of documentation of exposure Define key terms
6.6 Identify potential dangers to EMS providers and others at a scene where poisoning, alcohol abuse, or substance abuse is involved	 Identify and demonstrate potential dangers at scenes of Poisoning Alcohol abuse Substance abuse Define key terms
6.7 Use proper body mechanics when reaching, pushing, pulling, lifting, and moving patients and heavy objects	 Identify and demonstrate proper body mechanics Emergency moves Blanket drag Cloths drag Assisted walk Firefighter carry Non emergent moves Identifying self limits for lifting Define key terms
6.8 Explain the importance of determining the number of patients and the need for additional resources	 Demonstrate how to identify number of patients Identify and demonstrate additional resources needed

6.9 Describe the teamwork, timing, and transport decisions in assessing and	Identify and demonstrate transport decisions
managing patients with multisystem trauma or multiple trauma	 Identify and demonstrate teamwork
	 Identify and demonstrate management for multisystems trauma

Domain 3: Emergency Medical Services Systems 15-25% Instructional Time

STANDARD 1.0 DEMONSTRATE AN UNDERSTANDING OF THE EMERGENCY MED 1.1 Describe key historical events that influenced the development EMS	List and describe key historical events
1.1 Describe key historical events that inhidericed the development Ewis	 Define Key Terms
1.2 Describe the components of an EMS system and the roles of each component (e.g., agencies and organizations; highly trained professionals; communications and transportation networks; trauma systems and hospitals; an informed public that knows what to do in a medical emergency)	 List and describe components of EMS system Define Key Terms
1.3 Compare the training, roles, and responsibilities of EMRs, EMTs, AEMTs, and Paramedics	 List and describe the differences between EMR EMT AEMT Paramedic Define Key Terms
1.4 Describe desirable physical and personality traits of EMTs	 List and describe desirable physical and personality traits for an EMT Define Key Terms
1.5 Identify and explain specific statutes and regulations in Arizona regarding the EMS system	 Identify and describe Arizona statutes and regulations regarding EMS Define Key Terms
1.6 Describe the chain of survival and how it relates to the EMS system	 List and describe the chain of survival Describe how the chain of survival relates to the EMS system Define Key Terms
STANDARD 3.0 EXAMINE MEDICAL, LEGAL, AND ETHICAL ISSUES	
3.1 Review the EMT Basic Scope of Practice as outlined by the National Highway Traffic Safety Administration (NHTSA)	 Basic scope of practice as outlined by National traffic safety administration Basic scope of practice outlined by the state
3.2 Explain the difference between scope of practice and standard of care	 Define scope of practice Define standard of care Define key terms

3.3 Define and give examples of different types of patient consents (e.g., expressed, implied, consent for minors)	 Define and demonstrate types of consent Expressed Implied Consent of minors Pregnant teenagers Define key terms
3.4 Discuss different ethical issues encountered by emergency medical services and how to handle them (e.g., denying or delaying transport of patients, termination of resuscitation, restriction of EMS provider duty hours to prevent fatigue, substance abuse by EMS providers, and challenges of child maltreatment recognition and reporting)	 Identify different ethical issues encountered by EMS and how to handle them Denying or delaying transport Termination of resuscitation Substance abuse by EMS providers Identify Child abuse Identify Child neglect Identify mandatory reporting issues Define why documentation is important Define key terms
3.5 Explain advance directives, including do not resuscitate orders	 Describe Advanced Directives Do Not Resuscitate (DNR) Explain when and how advanced directives are used Define Key Terms
3.6 Explain the duty to act and legal protection provided by Good Samaritan laws	 Describe duty to act Explain the legal protection provided by Good Samaritan laws Define Key Term
3.7 Explain the importance and legality of patient confidentiality	 Describe patient confidentiality Explain the importance and legality of patient confidentiality Define Key Terms
3.8 Explain the meaning of libel and slander in relationship to EMS	 Describe libel and slander Describe how libel and slander relate to EMS Define Key Terms
3.9 Explain the EMT's responsibility regarding crime incidents (e.g., notifying the authorities and preserving the crime scene)	 List and describe the steps and responsibilities for EMTs regarding crime scenes Notifying authorities Preserving crime scene Define Key Terms
3.10 Discuss legal issues associated with required documentation	 Describe and discuss legal issues involving required documentation Define Key Terms

12.1 Recognize the types of ambulances specified by the U.S. Department of Transportation	 List and describe the different types of ambulances Define Key Terms
12.2 Discuss safe ambulance operation while responding to the scene	 List and describe safe ambulance operations Define Key Terms
12.3 Discuss safe ambulance operation while responding to the scene	 List and describe laws applicable to ambulance operations Define Key Terms
12.4 Describe the required equipment to be carried by EMS response units	 List and describe the equipment used by EMS units Define Key Terms
12.5 Describe the roles and responsibilities of the Emergency Medical Dispatcher	 List and describe the roles and responsibilities of an Emergency Medical Dispatcher Define Key Terms
12.6 Describe the phases of an ambulance call	 List and describe the steps for ambulance call Define Key Terms
12.7 Identify the phases of vehicle extrication and rescue operations	 List and describe the steps for vehicle extrication and rescue operations Define Key Terms
12.8 Describe the EMT's responsibilities in transferring patients to receiving healthcare personnel	 List and describe the responsibilities of patient transfer to receiving facility Define Key Terms